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February 9, 2009

BY HAND DELIVERY AND ELECTRONIC MAIL

Courtney Feeley Karp
Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: Beacon Power Corporation
Reply Comments: Alternative Energy Portfolio Standard Regulations

Dear Ms. Karp:

Beacon Power Corporation hereby submits its Reply Comments with respect to the above-referenced matter.

Kindly date-stamp a copy of this letter and return it to the messenger in the enclosed envelope so that we may retain a copy for our files.

Thank you for your attention to this matter.

Very truly yours,

Andrew O. Kaplan

Enc.

Beacon POWER

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENERGY RESOURCES

REPLY COMMENTS OF BEACON POWER CORPORATION

Beacon Power Corporation ("Beacon Power" or the "Company") respectfully submits Reply Comments relating to the proposed Alternative Energy Portfolio Standard ("APS") regulations that the Department of Energy Resources ("Department") issued on December 31, 2008. Beacon Power is appreciative of the Department's efforts to support the development of green energy resources into the marketplace and to encourage the participation in this proceeding of a wide-range of entities that develop and operate technologies designed to reduce carbon emissions. As Beacon Power stated at the public hearing and as discussed below, the Renewable Energy Portfolio Standard ("RPS")/APS regulations should include financial incentives so that entities that provide renewable energy resources using alternative technologies will invest capital and operate in the region. Not only will this ensure that greenhouse gas emissions are reduced, but from a public policy perspective, will affirm that the Department does not favor a particular resource over another. The Company recommends that the Department modify the proposed APS regulations at 225 CMR 16.05(1)(a)(3)(b) to: (1) correctly value the emission savings produced by Flywheel Storage Units as compared to other resources; and (2) correct an error in the calculation of electrical energy output of a Flywheel Storage Unit that may qualify for APS Alternative Generation.

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I. BACKGROUND AND PROCEDURAL HISTORY

On July 2, 2008, Governor Patrick signed S.B. 2768 that became Chapter 169 of the Acts of 2008, otherwise known as An Act Relative to Green Communities ("Act"). Pursuant to the Act at G.L. c. 25A, § 11 F½, the Department has proposed regulations that establish an alternative energy portfolio standard for all retail electricity suppliers selling electricity to end use customers. As delineated by law, the proposed regulations set forth qualifying alternative technologies, including flywheel energy storage systems.[1]

In October 2008, Beacon Power submitted Comments wherein it responded to the Department's questions concerning the calculation of the Annual APS percentage rate, the eligibility criteria for participation as an alternative technology and the calculation of the APS Alternative Compliance Payment ("ACP").[2]

On December 31, 2008, the Department issued proposed regulations for comment by interested persons. On February 3, 2009, Beacon Power submitted testimony wherein the Company respectfully requested that the Department modify the regulations in two respects – first to correct a clerical error and second to adopt a public policy that ensures comparable economic treatment of various renewable energy technologies.[3]

On February 5, 2009, the Company sponsored the testimony of Bill Capp, its Chief Executive Officer and Matt Polimeno, its Director of Government Programs. The instant

[1] *See* G.L. c. 25A, § 11F ½ (a)(3).
[2] For ease of reference, Beacon Power's Initial Comments are attached hereto as Appendix A.
[3] For ease of reference, Beacon Power's Written Testimony is attached hereto as Appendix B.

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comments are provided in accordance with the Department's Notice of Public Hearing on Proposed Final Regulations and focus on (1) using a standard metric (*i.e.*, carbon dioxide savings) upon which to calculate the benefit that each alternative technology provides to the grid and is used to ultimately calculate the APS Alternative Compliance Payments ("ACP") and (2) using the injected power into the gird that a flywheel provides rather than including electrical energy losses, which are already taken into account, to calculate electrical energy output of a Flywheel Storage Unit.

II. DESCRIPTION OF BEACON POWER CORPORATION

Beacon Power Corporation has developed an innovative flywheel-based energy storage technology to provide frequency regulation service to the power grid. To ensure reliability, the nation's power grid must maintain a grid frequency of 60 Hertz (cycles/second) at all times by constantly balancing the fluctuating demand for electricity with the supply generated by power plants. This function is referred to as "frequency regulation." Grid operators currently accomplish this by requiring about one percent of their generating capacity – mostly from fossil fuel-powered plants – to increase or decrease output in response to frequency deviations. When fossil fuel powered plants provide regulation, it decreases their efficiency and increases their emissions. Beacon Power's alternative technology provides regulation service by recycling existing electricity on the grid, by absorbing it when the supply is greater than demand and then injecting it back

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when needed to meet demand, thereby stabilizing the frequency of the grid. Using flywheels to provide frequency regulation creates zero direct emissions because it does not burn fossil fuel.

III. COMMENTS

A. The proposed regulations undervalue the CO_2 savings from Flywheel Storage Units as compared to other emissions-reducing technologies. The formula for calculating the amount of qualifying APS Alternative Generation from flywheels must be corrected to ensure that there is comparable treatment between technologies.

As stated repeatedly by the Governor and as echoed in the Department's mission statement, policies should be implemented to encourage the development of new technologies that will reduce greenhouse gas emissions. To ensure the development, construction and operation of new technologies in the region, the Department must implement regulations that provide financial incentives for entities to deploy the necessary capital and appropriate investment in the region. Given the considerable differences in the operational, design and electric energy output characteristics of each alternative technology eligible to qualify as an APS Alternative Generation Unit, it is essential that the Department set a standard metric upon which it will measure the benefits that each technology provides in reducing Greenhouse Gases. Public policy dictates that different resources be measured comparably so that the Department's regulations do not inadvertently discriminate against one technology over another. For market transparency and ease of administration, Beacon Power has recommended equating the value of an Alternative Energy Certificate ("AEC") to that of a Renewable Energy

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Certificate ("REC") by calculating ACPs based upon a technology's CO_2 savings as compared to the CO_2 savings of 1MWh of renewable energy. The ACP provided to Class I Renewable Resources, which emit zero CO_2, is approximately $50/MWh.[4] Given its design and as documented in the Company's Initial Comments, the CO_2 savings from flywheels is equivalent to 0.22 MWh of electricity generated from a Class I Renewable Energy Resource, which emits no carbon dioxide. With an ACP benchmark set at $50/MWh for zero CO_2 emissions, the comparable ACP provided to Flywheel Storage Units would be $11/MWh (22% of $50/MWh).

However, the Department has proposed an APS ACP rate of $20/MWh. Therefore, as proposed, the ACPs paid to Flywheel Storage Units would only be $4.40/MWh (*i.e.*, $20/MWh x 22%), which **significantly undervalues** the CO_2 savings produced by Flywheel Storage Units as compared to other technologies. Therefore, to correctly value the emissions reduction provided by Flywheel Storage Units, the Department should modify 225 CMR 16.05 (1)(a)(3)(b) to indicate that the portion of the electrical energy output of a Flywheel Storage Unit that may qualify for APS Alternative Generation shall be calculated each quarter of the Compliance Year as 55 percent of the electrical energy discharged from the Flywheel Storage Unit and not at 22 percent, as is currently proposed. This will ensure that Flywheel Storage Units are paid $11/MWh (*i.e.*, $20/MWh x 55% = $11/MWh) which is the comparable value of its emissions reductions as compared to other technologies. With increasing evidence of impending climate crisis, the Department

[4] The $50.00 payment was set by the Department in 2003 and is adjusted based upon the Consumer Price Index. *See* 2008 Report of Department of Energy Resources.

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cannot afford to undervalue the benefits a particular technology will make to reduce greenhouse gas emissions. In order to properly incentivize Flywheel Storage Units to be developed in Massachusetts, the Department must modify its Regulations as recommended herein.

B. As proposed the regulations erroneously reduce payments to Flywheel Storage Units because its formula double subtracts the electrical energy losses. The formula should only use the electrical energy discharged to the grid because it is a net value, already reflecting the losses.

In its proposed APS regulations, the Department incorrectly calculates a Flywheel Storage Units APS Alternative Generation amount as the electrical energy discharged from the Flywheel Storage Unit during the quarter **minus the electrical energy losses** from the Flywheel Storage Unit during the quarter. Effectively, this formula subtracts twice the electrical energy losses from the Flywheel Storage Unit thereby artificially reducing the efficiency of the Flywheel Storage Units and their contribution to reducing greenhouse gas emissions. As defined in the proposed Regulations at 225 CMR 16.05(1)(a)(3)(b), "electrical energy losses" are equal to the electrical energy used to charge the Flywheel Storage Unit. For example:

Losses = Electricity Used to Charge the Flywheel – Electricity Discharged

The above formula is mathematically equivalent to:

Electricity Discharged = Electricity Used to Charge the Flywheel – Losses

The formula in the Regulations to calculate APS Alternative Generation amount subtracts twice the flywheels electrical energy losses, as follows:

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APS Alternative Generation = Electricity Discharged - Losses

This is equivalent to:

APS Generation = (Electricity Used to Charge the Flywheel – Losses) – Losses

The amount of electrical energy discharged from the flywheel is measured and recorded by the NEPOOL GIS and is inclusive of electrical energy losses. Therefore, the proposed APS Regulations at 225 CMR 16.05 (1)(a)(3)(b) must be modified to ensure that the payments accurately reflect the electrical energy discharged to the grid and the formula must be corrected to state:

"Flywheel Storage Units APS Alternative Generation amount is the electrical energy discharged from the Flywheel Storage Unit during the quarter."

IV. CONCLUSION

To ensure that the Department implements APS regulations that do not inadvertently discriminate against the use of alternative energy technologies in favor of Class I Renewable Energy Resources, and to ensure that payments accurately reflect the gross amount of electrical energy discharged to the grid, Beacon Power respectfully requests that the APS regulation at 225 CMR 16.05 (1)(a)(3)(b) be modified as follows:

"The portion of the electrical energy output of a Flywheel Storage Unit that may qualify for APS Alternative Generation shall be calculated each quarter of the Compliance Year as ~~22~~ **55%** of the electrical energy discharged from the Flywheel Storage Unit during the quarter~~. minus the electrical energy losses from the Flywheel Storage Unit during the quarter, where the electrical energy losses are~~

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~~equal to the electrical energy used to charge the Flywheel Storage Unit during the quarter minus the electrical energy discharged from the Flywheel Storage Unit during the quarter."~~

Respectfully submitted,

BEACON POWER CORPORATION

Matthew E. Polimeno
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Dated: February 9, 2009

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APPENDIX A:

COMMENTS BY BEACON POWER CORPORATION ON THE ALTERNATIVE ENERGY PORTFOLIO STANDARD, CHAPTER 169 OF THE ACTS OF 2008

Dated: October 2008

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Comments by Beacon Power Corporation on the Alternative Energy Portfolio Standard, Chapter 169 of the Acts of 2008

Summary

Beacon Power suggests equating the value of an Alternative Energy Certificate (AEC) to that of a Renewable Energy Certificate (REC) by setting the Alternative Compliance Payment (ACP) amount for both programs equal to each other, and then adjusting the amount of AECs a resource receives based on its CO_2 savings as compared to the CO_2 savings of 1 MWh of renewable energy. Based on our analysis one MWh of energy provided by flywheel energy storage equals the CO_2 savings of 0.22 MWh of renewable energy. Based on this method, a flywheel energy storage resource should receive one AEC for every 4.54 MWh of energy injected onto the grid.

Introduction

Beacon Power Corporation's Smart Energy Matrix™ is a flywheel energy storage system that provides a long-term sustainable solution for the ancillary service of Regulation on the electricity grid. The core component of the Smart Energy Matrix™ systems is Beacon's 4th-generation 25 kWh/100 kW model based on Beacon's Patented Co-mingled Rim Technology® (PCRT). Its long-life, low-maintenance design and highly cyclic capability is intended to deliver a clean, cost-effective alternative to conventional fossil fuel-based frequency regulation methods.

The Green Communities Act of 2008 establishes a new program called the Alternative Energy Portfolio Standard (APS) which is designed to increase the technological diversity providing services to the electrical grid in Massachusetts. There are a limited number of technologies that have been pre-selected as qualified to participate in this program. These technologies vary greatly in their service to the electrical grid and the impact they have on the environment. In response to the Department of Energy Resources (DOER) request for input on how to implement the APS program, Beacon Power submits the following comments.

How should the Annual APS percentage rate be determined, and what should that rate be?

Beacon Power suggests that the DOER consider the current market penetration of each APS qualified technology and the level of penetration that theses resources could practically achieve over the course of the program. These levels should guide the DOER towards a percentage that is both realist and encourages the development of Alternative Energy resources. Using the method discussed below, the Alternative Energy Certificates (AEC) generated by a 5 MW Beacon Power facility would be equivalent to buying one AEC for every megawatt-hour associated with 0.00011% of kWh sales. If Beacon were to approach a majority share of the regulation market in New England this percentage would only increase to 0.00135% of load.

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What criteria should be required for any of the specified eligible technologies?

Beacon suggests using the criteria for the RPS as a template for the APS. A resource should be interconnected through the Independent Service Operator of New England (ISO-NE); be monitored by an independent third party participating in the New England Power Pool Geographic Information System (NEPOOL GIS); and have a positive environmental impact.

What should the Alternative Compliance Payment (ACP) amount be for APS, and how should it be calculated?

For market transparency and ease of administration, Beacon Power suggests equating the value of an AEC to that of a Renewable Energy Certificate (REC) by setting the Alternative Compliance Payment (ACP) amount for both programs equal to each other, and then adjusting the amount of AECs a resource receives based on its CO_2 savings as compared to the CO_2 savings of 1 MWh of renewable energy. The ACP amount would be $58.58 per AEC[1].

Each qualified alternative technology will vary greatly in the manner in which they operate, the service they provide to the grid, and how they avoid carbon dioxide emissions. These inherent differences create a need for a standardized metric to which the technology's benefit can be measured; we recommend that the CO_2 emission savings of one MWh of clean energy should be this metric. This would ensure fair, equitable, and appropriate program across a wide range technologies.

For example, flywheel energy storage has a CO_2 savings of 207[2] lbs per MWh it injects onto the grid. Currently in the service area of ISO-NE one MWh of electricity generates 960 lbs of CO_2[3]. That means flywheel will have to inject 4.54 MWh of energy onto the grid in order to have the same CO_2 savings as a Renewable Energy generating source, or said another way 0.22 MWh of renewable energy equals one MWh of energy provided by flywheel energy storage. Based on this method, a flywheel energy storage resource should receive one AEC for every 4.54 MWh of energy injected onto the grid.

To qualify for AECs each technology should have to supply evidence of their CO_2 reductions and be able to correlate those savings to an easily metered value. Beacon Power suggests using the number of MWh injected to the grid. This parameter can be metered, verified, and tracked by the NEPOOL GIS. Using a technology's CO_2 savings per MWh and the average CO_2 produced per MWh of electricity in ISO-NE a Certificate Equivalence Ratio[4] (CER) can be determined for every technology. This is defined by Equation 1. The equation for allocation of AECs is given by Equation 2. Equation 3 is the relationship

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[1] This price based off of a value of $50.00 in 2003 and adjusted based on the Consumer Price Index (Department of Energy Resources, 2008).
[2] This number is explained later based on two different reports (Fioravanti & Enslin, 2006), (Makarov, Ma, Lu, & Nguyen, 2008)
[3] (2007 ISO-NE Emissions Data)
[4] Note that the units of the CER are actually AECs per MWh.
(lbs CO_2 reduce / Alternative MWh) / (lbs CO_2 reduced/ REC) = RECs / Alternative MWh
Since one AEC = one REC, the final units of the R_{CO2} are AECs/ Alternative MWh

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between one MWh of renewable energy, one REC, one AEC, and technology specific number of MWhs of energy provided by an APS qualified resource.

Equation 1

$$R_{CO2} = \frac{Savings_{CO_2/kWh}}{960\ lbs\ CO_2}$$

Where:

$Savings_{CO_2/kWh} =$ *lbs CO_2 Reduction/MWh for an APS qualified resource*

$960\ lbs\ CO_2 =$ *lbs CO_2 associated with one REC in New England*

Equation 2

$$Amount\ AECs = R_{CO_2} \times Metered\ Energy$$

Where:

$R_{CO2} =$ **Credit Equivalence Ration** (*Number of AECs awarded per MWh*)

$Metered\ Energy =$ *The measured amount of energy injected to the grid in MWh*

Equation 3

$$1\ MWh\ Renewable = REC = AEC = \frac{1}{R_{CO_2}}\ MWh\ Alternative$$

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Table 1 shows the relationship between the number of MWhs an alternative energy source must generate or inject to the grid to earn one AEC.

Table 1: Allocation of AEC based on Certificate Equivalence Ratio

Certificate Equivalence Ratio	MWh Needed to Earn one AEC
R_{CO2}	MWh
0.10	10.00
0.20	5.00
0.30	3.33
0.40	2.50
0.50	2.00
0.60	1.67
0.70	1.43
0.80	1.25
0.90	1.11
1.00	1.00

Example: Beacon Power

KEMA Inc. performed an emissions analysis of Beacon Power's flywheel energy storage technology under contract by Sandia National Laboratories as part of Department of Energy (DOE) program[5].

Table 2 shows a summary of the CO_2 reductions associated with using Beacon Power's flywheel energy storage to provide Regulation service in ISO-NE.

Table 2: Beacon Power's CO_2 Savings and Certificate Equivalence Ratio

Flywheel Savings	CO_2	R_{CO2}
ISO-NE	lbs./ $MWh_{displaced}$	Credit Equivalence Ratio
Coal	452	0.47
Natural Gas	207	0.22
Pump Storage	87	0.09

According to data collected by Energy Velocity, 94.6% of the energy produced by cycling units in New England is fueled by natural gas[6]. More importantly, our CER should be based on the fuel source of the marginal unit we displace in New England which is natural gas. Therefore a baseline value of 0.22 is assumed for Beacon Power's CER.

[5] (Fioravanti & Enslin, 2006)
[6] (Ventyx, 2008)

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Equation 1 for Beacon Power

$$R_{CO2} = \frac{Savings_{CO_2/kWh}}{960\ lbs\ CO_2} = \frac{207}{960} = 0.22$$

Equation 2 for Beacon Power

$$AECs = R_{co_2} \times Metered\ Energy = 0.22\ x\ Metered\ Energy$$

Therefore, for each MWh of energy that is recycled back onto the grid using Beacon Power's flywheel based energy storage system, Beacon will receive 0.22 AECs that are equivalent in both monetary and social value to that of 0.22 RECs.

What specific means of monitoring and verification will be necessary for compliance with APS regulation?

To qualify for AECs each technology should have to supply evidence of their CO_2 reductions and be able to correlate those savings to an easily metered value. Beacon Power suggests using the number of MWh injected to the grid. This parameter can be metered, verified, and tracked by the NEPOOL GIS. Each technology's CER should be reevaluated once every two years using NEPOOL GIS data. This will take into account changes in the technology's savings as well as any change to the equivalent CO_2 savings of a clean MWh over the course of the year.

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APPENDIX B:

WRITTEN TESTIMONY BY BEACON POWER CORPORATION ON THE ALTERNATIVE ENERGY PORTFOLIO STANDARD, CHAPTER 169 OF THE ACTS OF 2008

Dated: February 2009

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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENERGY RESOURCES

PRE-FILED TESTIMONY OF MATTHEW E. POLIMENO
BEACON POWER CORPORATION

Q. Please state your name, title and business address.

A. My name is Matthew E. Polimeno. I am the Director of Government Programs for Beacon Power Corporation. My business address is 65 Middlesex Road, Tyngsboro, Massachusetts.

Q. On whose behalf are you testifying this afternoon?

A. I am testifying on behalf of Beacon Power Corporation, the developer of a flywheel-based energy storage technology that provides ancillary Regulation and Frequency Response Service. Beacon Power's system operates by using flywheels to store energy when generated power (i.e., supply) exceeds load and return it to the grid when load exceeds supply. When commercially deployed, Beacon Power's energy storage technology will enhance electrical system reliability, lower costs to ratepayers, help support the integration of renewable resources, reduce CO_2 greenhouse gas emissions, and increase regional power generation capacity.

Q. What is the purpose of your testimony?

A. I am testifying in response to the proposed regulations issued by the Department of Energy Resources (the "Department") on December 31, 2008, regarding an Alternative Energy Portfolio Standard ("APS"), 225 CMR 16.00. Specifically, Beacon Power has concerns with the proposed regulation related to 225 CMR 16.05(1)(a)(3)(b), which outlines the mechanism for calculating APS Alternative Compliance Payments ("ACP")

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and 225 CMR 16.08(3)(a)(2), which establishes the ACP rate for the APS minimum standard.

Given the considerable differences in the operational, design and electric energy output characteristics of each alternative technology eligible to qualify as an APS Alternative Generation Unit, Beacon Power continues to believe that the Department should establish a standard metric upon which each technology's benefits to the grid are measured. Beacon Power further asks that APS Alternative Compliance Payments (ACPs) be calculated using economic criteria comparable to that used to calculate the ACP for Renewable Energy Portfolio Standards ("RPS"). While it appears that the Department has attempted to ensure that the two ACPs are equivalent in value, the specific mechanism proposed by the Department to calculate the APS ACP results in an economic disparity between APS and RPS in regards to flywheel technology. Moreover, the proposed calculation erroneously includes electrical energy losses, which are already discounted by the NEPOOL Generation Information System (GIS) and which, if maintained in the Department's regulation, will result in double losses to Beacon Power. Accordingly, as detailed below, Beacon Power respectfully requests that the Department issue final regulations that ensure comparable economic values for Beacon's technology between APS and RPS ACPs and remove the erroneous statement about electrical energy losses.

Q. What is Beacon Power's concern with respect to the Department's proposed calculation for an Annual APS percentage rate?

A. In its Comments submitted to the Department in October 2008, Beacon Power recommended that the Department set the economic metric upon which to calculate ACPs, based on the carbon dioxide emission savings for one megawatt hour ("MWh") of clean

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energy produced. For RPS electricity suppliers, the Department set the ACP at $50/MWh. In its Comments, Beacon Power established that one MWh of energy discharged into the grid by a Flywheel Storage Unit is equivalent to 22 percent of one MWh of energy discharged into the grid by a Class I RPS technology, such as wind energy. Using this mechanism and assuming a benchmark payment of $50/MWh for energy output with zero carbon dioxide emissions, the APS ACP would equal $11/MWh (*i.e.*, 22% of $50). This is the amount that Beacon Power recommended that the Department pay for the electrical energy output of flywheels.

As proposed however, the Department established an APS ACP Rate at $20/MWh for Compliance Year 2009. Using this rate *and* calculating the electrical energy output of a Flywheel Storage Unit at 22 percent of $20/MWh, results in an ACP of $4.40. The economic disparity in the price paid to RPS and APS suppliers devalues the benefits provided by flywheels, including its fast response time, high operating efficiency, low maintenance requirements and zero direct carbon dioxide greenhouse gas emissions. Currently, the Department has determined that each MWh of carbon-free electricity produced equals $50, in accordance with 225 CMR 14.00 *et seq.* As stated above, Beacon Power established that one MWh of energy discharged into the grid by a Flywheel Storage Unit is equivalent to 22 percent of one MWh of energy discharged into the grid by a Class I RPS technology. Therefore, Beacon Power's "value to society" would be calculated as .22 x $50 = $11.

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If an APS is worth $20/MWh and Beacon Power's energy provides a benefit worth $11/MWh, then Beacon Power's percentage should be 55 percent (i.e., $11 divided by $20).

Q. What changes to the proposed regulations are necessary to ensure that RPS and APS suppliers are paid on a comparable basis?

A. To ensure that RPS and APS have equal value, the Department should modify its regulations at 225 CMR 16.05(3)(b) to read, "The Portion of the electrical output of a Flywheel Energy Storage Unit that may qualify for APS Alternative Generation shall be calculated each quarter of the Compliance Year as **55%** of the electrical energy discharged from the Flywheel Storage Unit during the quarter." Moreover, Flywheel Energy Storage Units receive payments based upon electrical energy discharged to the grid, which is a net value monitored by the NEPOOL GIS and is inclusive of losses. Accordingly, Beacon Power respectfully requests that the Department delete the remainder of 225 CMR 16.05(1)(b)(3) that addresses electrical energy losses.

Q. Please summarize how Beacon Power envisions the final regulation to read.

A. 225 CMR 16.05 (1)(a)(3)(b) should be modified to read as follows: "The portion of the electrical output of a Flywheel Energy Storage Unit that may qualify for APS Alternative Generation shall be calculated each quarter of the Compliance Year as 55% of the electrical energy discharged from the Flywheel Storage Unit during the quarter."

The following is a redlined version for clarity: "The portion of the electrical output of a Flywheel Energy Storage Unit that may qualify for APS Alternative Generation

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shall be calculated each quarter of the Compliance Year as ~~22%~~55% of the electrical energy discharged from the Flywheel Storage Unit during the quarter~~minus the electrical energy losses from the Flywheel Storage Unit during the quarter. Where the electrical losses are equal to the electrical energy used to charge the Flywheel Storage Unit during the quarter minus the electrical energy discharged from the Flywheel Storage Unit during the quarter.~~"

Q. Does this conclude your testimony?

A. Yes.

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